



Evaluating Nigerian Government Policies on Poverty Alleviation and Food Security in the Conflict-Affected North-East Region

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ABSTRACT

This study examines the effectiveness of Nigerian government policies in combating poverty and food insecurity in the North-East, with a focus on the BAY states, Borno, Adamawa, and Yobe. Despite abundant natural resources and successive poverty alleviation programs, these regions continue to experience severe deprivation due to protracted insurgency, economic instability, and governance failures. Using a qualitative research design based on secondary data from policy documents, institutional reports, and international organizations, the study analyzes how macroeconomic reforms, such as fuel subsidy removal and currency devaluation, intersect with local agricultural and social protection policies. The findings reveal that while national and state frameworks—including the National Agricultural Technology and Innovation Policy and state-level Food Security Sector Strategies—provide structured approaches to recovery, weak institutional coordination, inflation, and insecurity undermine their effectiveness. Comparative evidence from Sub-Saharan Africa suggests that decentralized interventions and public-private partnerships enhance resilience only when supported by accountable governance and sustainable financing. The discussion integrates the Rational Comprehensive Model of Decision-Making to interpret the trade-offs between economic rationality and social welfare, emphasizing the need for adaptive, participatory policy frameworks. Overall, the study concludes that addressing food insecurity and poverty in Nigeria requires aligning macroeconomic reforms with inclusive social protection and institutional reform. It contributes to the academic discourse by linking rational policymaking, governance quality, and humanitarian resilience, offering evidence-based recommendations for achieving sustainable food security and poverty eradication in fragile contexts.

Keywords

agricultural policy; economic reform; food insecurity; governance; Nigeria; poverty alleviation; sustainable development

JEL Classification: H24, I38, O13, O17, Q18

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INTRODUCTION

Poverty and food insecurity remain two of the most pervasive global development challenges, particularly in Sub-Saharan Africa (SSA), where economic growth has not consistently translated into equitable improvements in human well-being. Despite significant progress in global poverty reduction between 1990 and 2015, SSA continues to record some of the highest poverty and food insecurity rates worldwide. The combined impacts of climate change, rapid population growth, weak governance, and prolonged conflict have perpetuated a vicious cycle of deprivation that undermines both human development and economic stability (L'Huillier, 2016; Nissanke & Sindzingre, 2006). In 2022 alone, approximately 78 million people in SSA were classified as severely food insecure, reflecting a deterioration in food availability and access (Capretti et al., 2022; Cordes & Morrison, 2023). The COVID-19 pandemic further exacerbated this condition, with projections suggesting that over 40 million additional individuals were pushed into extreme poverty across the region (Moyer et al., 2022). Nigeria, SSA's largest economy and most populous nation, mirrors this regional trajectory, with an estimated 63% of its population currently living below the national poverty line (Mogess et al., 2023). The persistence of poverty in Nigeria, despite its resource endowments, underscores systemic socio-economic vulnerabilities and governance deficits that continue to hinder the achievement of sustainable development (Asongu & Kodila-Tedika, 2017; Olaoye, 2023; Saidi et al., 2023).

In Nigeria, the challenge of food insecurity is closely intertwined with poverty, as most low-income households depend on subsistence agriculture highly vulnerable to climatic variability and insecurity. Agriculture employs nearly 70% of the nation's labor force, yet productivity remains low due to inadequate access to modern farming technologies, limited infrastructure, and the impact of recurrent conflict (Pillarissetti et al., 2007; Van Royen et al., 2013). These structural weaknesses have been further magnified by recent economic reforms, particularly the removal of fuel subsidies and the devaluation of the naira, which have triggered sharp increases in food and energy prices. Inflation reached 22% in early 2023, while food inflation exceeded 30%, rendering essential commodities unaffordable for millions (Aiyedogbon et al., 2022; Okopi, 2022). The humanitarian consequences of these dynamics are profound—rising malnutrition, declining household purchasing power, and widening inequality between urban and rural populations (Olanrewaju & Balana, 2023). These conditions make Nigeria's North-East, especially the BAY states (Borno, Adamawa, Yobe), one of the most food-insecure regions in the world.

The persistence of poverty and food insecurity in North-East Nigeria stems from deeply entrenched structural and socio-political factors. Chief among these is the

protracted insurgency led by Boko Haram, which has devastated agricultural livelihoods and displaced over 2.5 million people since 2009 (Amalu, 2016; Ugwueze et al., 2022). The conflict has resulted in widespread destruction of farmland, livestock, and infrastructure, leading to a collapse of local economies and a reliance on humanitarian aid (Olanrewaju & Balana, 2023; Rabiou et al., 2022). Internally displaced persons (IDPs) in Borno State report that over 85% of households attribute their food insecurity directly to the insurgency (Olanrewaju & Balana, 2023). Beyond conflict, economic instability, marked by inflation, currency depreciation, and unemployment, has eroded purchasing power and further constrained access to food. Weak governance and corruption exacerbate these conditions, as resources intended for social protection or agricultural investment are frequently misallocated or poorly managed (Folorunso et al., 2020; Okunola & Ojo, 2019; Omoniyi, 2018; Targba, 2022).

The Nigerian government has, over several decades, implemented various agricultural and social protection policies to alleviate poverty and improve food security. Landmark initiatives such as “Operation Feed the Nation” (1976) and the “Green Revolution” (1980s) sought to promote food self-sufficiency but failed due to inadequate support mechanisms, weak institutional capacity, and inconsistent policy continuity (Aiyedogbon et al., 2022; Eneji & Akwaji, 2018). Subsequent programs, including the National Poverty Eradication Programme (NAPEP, 2001), the National Special Program on Food Security (2002), and the Root and Tuber Expansion Program (2008), attempted to diversify agricultural production and strengthen smallholder farmers. However, their long-term impact has been limited by structural inefficiencies, underfunding, and lack of local ownership (Idakwo et al., 2022; Strang et al., 2020). More recently, the Agricultural Promotion Policy (2016–2020) and the National Agricultural Technology and Innovation Policy (NATIP, 2022–2027) have emphasized modernization and technological innovation, aiming to align Nigeria’s agricultural sector with global food systems. Yet empirical evidence indicates that farmers continue to face substantial barriers, such as limited access to credit, inputs, and secure land tenure, which hinder the full realization of policy goals (Nwozor et al., 2019).

Social protection policies have also emerged as critical instruments for addressing food insecurity, especially among vulnerable populations. The National Social Investment Programme (NSIP), which includes conditional cash transfers and school feeding initiatives, was designed to provide immediate relief and stimulate local economies. Although some improvements in household food consumption patterns have been recorded, the programs’ coverage and sustainability remain insufficient due to bureaucratic inefficiencies and limited fiscal capacity (Osabohien et al., 2020; Oyetunde–Usman & Olagunju, 2019). Moreover, climate change continues to threaten

the effectiveness of these interventions, as erratic rainfall patterns and flooding disrupt agricultural cycles and heighten vulnerability in rural areas ([Adebisi et al., 2022](#)).

The recent economic reforms under President Tinubu's administration, particularly the 2023 fuel subsidy removal and currency devaluation, have compounded these challenges. While intended to stabilize public finances and stimulate long-term economic efficiency, these reforms have triggered immediate inflationary shocks that disproportionately affect low-income households. The removal of fuel subsidies raised transport and production costs, inflating food prices nationwide ([Aiyedogbon et al., 2022](#)). Simultaneously, the devaluation of the naira increased import costs for agricultural inputs such as fertilizers and seeds, further constraining domestic food production ([Akintunde et al., 2019](#)). Empirical assessments reveal that approximately 70% of Nigerian households now struggle to meet their food needs, with the poorest segments facing acute malnutrition ([Adepoju & Obialo, 2022](#); [Echendu, 2022](#)). These economic disruptions have widened socio-economic inequalities, undermined household welfare, and increased dependency on humanitarian assistance.

Collaborative frameworks among government institutions, NGOs, and international organizations such as the FAO, WFP, and UNDP have become increasingly vital to mitigating these crises. These partnerships have facilitated resource pooling, policy coordination, and localized interventions targeting the most vulnerable communities. The Growth Enhancement Support Scheme (GESS), for example, implemented with international support, improved farmers' access to subsidized inputs, thereby enhancing agricultural productivity and food accessibility ([Uduji et al., 2019](#)). Similarly, FAO-assisted programs have promoted sustainable agricultural practices and established food safety standards that align with Nigeria's development objectives ([Abdulwaliyu et al., 2023](#)). Nonetheless, the effectiveness of these collaborations often depends on coordination among actors and long-term commitment from both domestic and international stakeholders ([Kawiti & Okello, 2023](#); [Kowalska et al., 2022](#)).

Recent studies underscore that while these interventions have produced localized successes, systemic challenges persist. Bureaucratic inefficiency, inconsistent policy implementation, and insecurity in the North-East limit the scalability and sustainability of such initiatives ([Aliyu et al., 2021](#)). The persistence of dependency on external aid raises questions about the long-term resilience of local food systems. Furthermore, gender disparities, limited educational opportunities, and infrastructural deficiencies continue to entrench poverty and restrict agricultural innovation ([Denue et al., 2018](#); [Khan & Cheri, 2016](#)). Despite this, the collaborative engagement between state and non-state actors demonstrates the potential for integrated approaches that combine humanitarian assistance with sustainable development planning.

Against this backdrop, the present study seeks to provide a comprehensive analysis of Nigerian government policies aimed at combating poverty and food insecurity in the North-East, with particular attention to the BAY states. Building upon prior research, this study explores how federal and state-level initiatives—supported by international and local partners—have sought to address structural inequalities, enhance agricultural resilience, and promote food security amidst economic and political instability. The study fills a significant research gap by synthesizing evidence from recent policy reforms and regional interventions, thereby contextualizing their implications for national development. The novelty of this research lies in its integrated assessment of socio-economic, policy, and humanitarian dimensions of food insecurity within Nigeria's most fragile region. By employing a qualitative, evidence-based approach, it advances understanding of how coordinated governance and policy coherence can transform crisis-affected communities into resilient and self-reliant populations, aligning with the broader goals of the Sustainable Development Agenda.

LITERATURE REVIEW

Theoretical Frameworks on Poverty and Food Insecurity

The study of poverty and food insecurity in Sub-Saharan Africa, especially in Nigeria, has drawn extensively from three major theoretical perspectives: the Sustainable Livelihoods Approach (SLA), Human Development Theory, and Rational Choice Theory. The SLA provides a holistic framework for analyzing how individuals and households combine and transform resources, natural, human, physical, social, and financial capitals, to achieve sustainable well-being ([Heger et al., 2020](#)). In the Nigerian context, this approach underscores how environmental degradation, poor infrastructure, and weak access to financial resources directly influence household vulnerability ([Dada & Akinlo, 2021](#)). Empirical studies applying SLA demonstrate that interventions focusing on strengthening community assets and resilience, through microcredit, improved agricultural practices, and educational access, yield significant benefits for food security outcomes in rural Nigeria.

Human Development Theory, advanced by Amartya Sen and subsequent scholars, expands the understanding of poverty beyond income measures by focusing on human capabilities and freedoms ([Fukuda-Parr, 2003, 2011](#); [Kuhumba, 2017](#)). Within this framework, food insecurity is understood as a deprivation of the capability to live a healthy, productive life. Empirical evidence shows that access to education and healthcare enhances agricultural productivity and food access, thereby reducing poverty ([Li & Qamruzzaman, 2023](#); [Van Der Elst, 2015](#)). Complementarily, Rational Choice Theory offers micro-level insights by examining decision-making under resource

constraints. In fragile economies, households prioritize short-term survival over long-term investments in agriculture, perpetuating cyclical poverty (De Milliano & Plavgo, 2018; Driver et al., 2022). This framework explains the low adoption of agricultural innovations in Nigeria, where perceived risks, market volatility, and institutional failures shape individual behavior (Chen & Ravallion, 2000). Together, these theories provide a multidimensional analytical base, highlighting the intersection of structural, behavioral, and institutional determinants of poverty and food insecurity.

Empirical Evidence on Agricultural and Social Protection Interventions

Empirical findings across Nigeria and comparable low-income countries show that agricultural and social protection programs significantly affect food security and poverty reduction. The Nigerian Growth Enhancement Support Scheme (GESS), designed to distribute fertilizers and seeds directly to farmers, has measurably increased productivity and income among smallholders (Ogunniyi et al., 2021). Similarly, agricultural financing schemes that combine access to credit with technical training have led to improved crop yields and diversification (Omodero & Ehikioya, 2022). Comparable initiatives such as Ethiopia's Productive Safety Net Program (PSNP) show that targeted support through food or cash transfers boosts caloric intake and resilience against food shocks (Hailu & Amare, 2022).

Parallel evidence demonstrates that social protection mechanisms, particularly cash transfers, buffer households against economic shocks. In Nigeria, recipients of the National Social Investment Programme maintained higher food consumption levels during crises, especially during COVID-19 (Dasgupta & Robinson, 2021). Studies in Bangladesh and Ethiopia similarly confirm that social safety nets improve household welfare, reduce vulnerability, and stimulate local economies (Ahmed et al., 2023; Woldemichael & Alemu, 2024). However, challenges persist regarding outreach, bureaucratic inefficiency, and uneven program coverage (Abubakar et al., 2019). The consensus across studies is that the success of these interventions depends on strong implementation mechanisms, adequate funding, and contextual adaptation to regional socio-economic realities.

Conflict, Displacement, and Governance in Poverty and Food Security Dynamics

The intersection of conflict, displacement, and governance quality critically mediates the effectiveness of poverty alleviation policies in fragile states like Nigeria. Prolonged insurgency in the North-East, driven by Boko Haram since 2009, has displaced over 2.5 million people, destroyed farmland, and disrupted trade networks (Abdullahi et al., 2020; Ogbonna & Ruiz Jiménez, 2017). These conditions erode livelihoods, deepen dependency on humanitarian aid, and impede government program delivery (Kamta

et al., 2021). Studies reveal that internally displaced persons (IDPs) face severe food insecurity, with many unable to access land or employment, leading to chronic malnutrition (Kamta et al., 2020).

Equally critical is the role of governance quality. Corruption, institutional inefficiency, and policy discontinuity undermine the capacity of government agencies to implement anti-poverty strategies (Arema et al., 2023; Fagbemi et al., 2020). Empirical analyses show that poor governance correlates strongly with low policy effectiveness and weak public trust (Orie, 2021). Countries such as Somalia and South Sudan demonstrate that improvements in governance, accountability, and local participation are prerequisites for sustained food security (Kamta et al., 2021). The Lake Chad Basin experience underscores the value of transnational collaboration and community-based governance in mitigating resource competition and enhancing policy resilience. Hence, sustainable poverty reduction in Nigeria's North-East requires not only financial interventions but also structural reforms in governance, security, and institutional coordination.

The Role of International Organizations and Public–Private Partnerships

International organizations and public–private partnerships (PPPs) play indispensable roles in advancing coherent and effective food security and poverty alleviation policies in developing economies. Organizations such as the FAO, WFP, and UNDP support Nigeria through technical assistance, funding, and capacity-building that promote policy integration and sustainability (Yusriadi, 2023). For instance, FAO-led initiatives such as the *Zero Hunger Initiative* provide frameworks for agricultural modernization and sustainable resource management, while WFP programs deliver emergency food aid and promote nutrition-sensitive interventions (Barrett, 2001).

PPPs complement these efforts by leveraging the innovation and efficiency of the private sector. In Nigeria, PPP-driven agricultural value chain projects have enhanced market linkages for smallholder farmers, improved access to agricultural inputs, and encouraged technology transfer (Rochefort et al., 2021). Evidence indicates that PPPs significantly improve productivity by investing in irrigation systems, storage facilities, and rural infrastructure. However, coordination challenges remain: conflicting stakeholder agendas and bureaucratic bottlenecks can reduce program efficiency (Zhang & Zhou, 2021). Transparency and equitable resource allocation are critical for sustaining the legitimacy and outcomes of these partnerships (Maksum et al., 2023; Oteros-Rozas et al., 2019). Overall, international collaborations and PPPs represent crucial vehicles for policy coherence, innovation diffusion, and inclusive development.

Criticisms in Existing Studies

Despite extensive literature on Nigeria's poverty and food security programs, several gaps and criticisms persist. First, much research lacks context-specific analyses, overlooking regional variations in livelihood patterns and vulnerability. Studies tend to generalize findings without capturing sub-national nuances, limiting the policy relevance of their conclusions (Adeleke et al., 2023; Okunola & Ojo, 2019). Second, the dearth of longitudinal studies restricts understanding of policy sustainability. Most evaluations assess short-term outcomes without examining the enduring impacts of programs on household welfare (Akumbom et al., 2023; Oduntan & Loy, 2022). Third, existing research is heavily agriculture-centric, often neglecting the broader economic and social dimensions of poverty, including urban livelihoods and non-farm employment (Onuoha et al., 2023; Takeshima, 2014).

Further criticism concerns the limited exploration of governance and institutional capacity. Corruption and weak policy coordination are frequently identified but rarely empirically quantified, leaving major explanatory gaps in understanding why poverty persists despite policy interventions (Fagbemi et al., 2020; Zhang & Zhou, 2021). Moreover, the scarcity of reliable, disaggregated data constrains evidence-based policymaking (Barbier & Hochard, 2018). Research also reveals inadequate stakeholder engagement in policy formulation, leading to top-down strategies that fail to resonate with grassroots realities (Ferraro et al., 2011; Maksum et al., 2023). Addressing these weaknesses requires greater methodological rigor, participatory research designs, and enhanced data infrastructure.

Research Gap and the Significance of the Study

Despite extensive scholarship on poverty alleviation and food security in Nigeria, critical research gaps persist in the contextual, institutional, and empirical dimensions of existing studies. Many works provide broad national analyses but insufficiently account for subregional variations, particularly in conflict-prone zones such as the BAY states (Adeleke et al., 2023; Okunola & Ojo, 2019). The absence of longitudinal assessments limits understanding of program sustainability and long-term livelihood outcomes (Akumbom et al., 2023; Oduntan & Loy, 2022). Moreover, current research often isolates agriculture from other socio-economic determinants, governance, gender equity, and market access, that jointly influence food security and poverty dynamics (Onuoha et al., 2023; Takeshima, 2014).

This study addresses these limitations by providing an integrated, context-specific analysis of government and non-governmental interventions in Nigeria's North-East. It contributes to the literature by linking macroeconomic reforms, governance quality, and social protection to household welfare outcomes, offering a holistic understanding

of the poverty–food insecurity nexus. The study’s focus on recent policy reforms, institutional performance, and inter–sectoral collaboration provides valuable insights for evidence–based policymaking. By situating its analysis within established theoretical frameworks and empirical realities, the study advances scholarly discourse on sustainable poverty alleviation and informs the design of more resilient and inclusive food security strategies for Nigeria and comparable developing economies.

METHOD

Research Design

This study employed a qualitative research design to examine the policies and programs adopted by the Nigerian government and non-governmental organizations in combating poverty and food insecurity in the North-East, particularly in Borno, Adamawa, and Yobe States. The qualitative approach was selected to gain an in-depth understanding of complex socio-economic and policy dynamics that cannot be adequately captured through quantitative metrics alone. Qualitative research allows scholars to explore behaviors, perceptions, motivations, and institutional practices through interpretive and descriptive analysis (Bansal et al., 2018; Garcia & Gluesing, 2013; Skarbek, 2020). In this study, the design aimed to identify the interplay between policy formulation, implementation, and lived experiences of affected populations, especially in conflict-affected and economically marginalized areas. The approach also facilitated an integrative interpretation of textual data from diverse documentary and secondary sources, emphasizing thematic coherence and interpretive depth.

Area of Study

The research was conducted in the North-East geopolitical zone of Nigeria, which comprises six states: Adamawa, Borno, Bauchi, Gombe, Taraba, and Yobe. However, the focus was narrowed to Borno, Adamawa, and Yobe (BAY States) due to their higher exposure to armed conflict, displacement, and severe food insecurity. The region borders Niger Republic to the north, Cameroon to the south, and Chad Republic to the east, while it shares internal boundaries with Benue, Plateau, Kano, Jigawa, and Nasarawa States. These geographical and socio-political intersections make the area both agriculturally strategic and vulnerable to transnational crises, including insurgency and cross-border displacement. The BAY States were selected as the focal points because they represent the epicenter of humanitarian distress in Nigeria and are central to national and international interventions addressing poverty and hunger.

Population and Scope of Study

The target population comprised individuals, communities, and institutions affected by or engaged in poverty reduction and food security programs in the BAY States. This

includes beneficiaries of agricultural and social protection policies, policymakers, and supporting institutions such as the National Emergency Management Agency (NEMA), the Food and Agriculture Organization (FAO), the World Food Programme (WFP), and local ministries of agriculture. While the study did not involve direct field surveys due to methodological limitations and security concerns, it systematically reviewed documents that encapsulate the experiences, outcomes, and policy frameworks relevant to these populations. The temporal scope of the study extends from 2000 to 2024, capturing major national and subnational poverty and food security programs implemented within this period, including the Agricultural Promotion Policy (2016–2020), the Economic Recovery and Growth Plan (2017–2020), and the National Agricultural Technology and Innovation Policy (2022–2027).

Data Sources and Collection Procedures

The study relied exclusively on secondary data sources, comprising published and unpublished academic works, government policy documents, research reports, and verified online publications. Key sources included official bulletins, national policy frameworks (such as NATIP and NDP 2021–2025), FAO and WFP reports, and local newspapers such as *Premium Times* and *The Punch*. International and regional organizations' repositories were also consulted to obtain consistent and verifiable data on humanitarian responses and agricultural initiatives.

Data were retrieved from reliable electronic databases and institutional repositories, including FAOLEX, ReliefWeb, and the Nigerian Food Security Sector (NFSS). To ensure accuracy and credibility, data triangulation was employed by comparing findings across multiple independent sources addressing similar themes. Each document was evaluated for authenticity, publication credibility, and relevance to the research objectives. In alignment with Higgins et al. (2008), the study also adopted a systematic review approach, which involves identifying, evaluating, and synthesizing existing evidence to provide comprehensive and evidence-based insights.

Data Analysis

Data were analyzed using thematic analysis, a method suitable for identifying patterns, relationships, and conceptual linkages within qualitative data. The analysis involved coding recurrent themes related to policy design, implementation challenges, socio-economic effects, and institutional responses. These themes were organized around the study's major objectives: (1) to examine existing government policies addressing poverty and food insecurity, (2) to assess their implementation and outcomes, and (3) to identify structural challenges limiting their effectiveness.

Through inductive reasoning, the data were synthesized to reveal recurring patterns across states and policy frameworks. The analysis also employed

comparative evaluation between federal and state-level strategies, particularly the alignment of local interventions such as Borno's Food Security Sector Strategy (2024–2026) and Adamawa's Social Protection Policy (2023) with national frameworks like NATIP (2022–2027). The interpretive process emphasized policy coherence, institutional synergy, and their implications for household welfare and agricultural sustainability.

Theoretical Anchoring and Analytical Framework

The analysis was anchored in the Rational Comprehensive Model of Decision-Making propounded by Becker (1993). This theoretical model assumes that policymakers act rationally to select the most efficient strategies based on available information and predicted outcomes. Within the study, this model provided an analytical lens for evaluating the rationality of government decisions such as the removal of fuel subsidies and the devaluation of the naira, which were justified as long-term economic reforms but produced immediate socio-economic shocks. The theory facilitated critical assessment of how decision-making processes balance political, economic, and humanitarian objectives in policy formulation. It also illuminated how limited institutional capacity, bureaucratic inertia, and governance deficits distort rational policy implementation in Nigeria's poverty alleviation efforts.

Validity, Reliability, and Ethical Considerations

Although the study relied primarily on secondary data, methodological rigor was ensured through critical evaluation and triangulation of sources. Only credible materials from peer-reviewed journals, official publications, and reputable organizations were included. To maintain reliability, data were cross-checked for internal consistency and temporal relevance. The use of qualitative synthesis minimized subjective bias by focusing on convergent evidence from multiple independent reports.

Ethical considerations centered on the responsible use and attribution of secondary data. The study strictly adhered to academic integrity standards by properly citing all sources and acknowledging institutional authorship. As no primary data involving human participants were collected, issues of confidentiality and informed consent were not applicable. However, sensitivity to humanitarian contexts, such as the plight of internally displaced persons and conflict-affected populations, was observed in all interpretations and conclusions.

RESULTS

Overview of Findings

The results of this study reveal a complex and multidimensional relationship between poverty, food insecurity, and economic instability in Nigeria's North-East, particularly in

the BAY states of Borno, Adamawa, and Yobe. Despite successive policy frameworks and programs implemented by the federal and state governments, supported by international partners, the region continues to experience high levels of deprivation. Findings show that poverty and hunger remain endemic, aggravated by persistent insecurity, the removal of fuel subsidies, inflationary pressures, and currency depreciation. These macroeconomic shocks have severely reduced household purchasing power, disrupted agricultural productivity, and increased reliance on humanitarian aid. The study found that although the Nigerian government has declared food insecurity a national emergency and introduced new interventions through the National Agricultural Technology and Innovation Policy (NATIP 2022–2027), the implementation gap between policy formulation and field-level outcomes remains wide.

Macroeconomic and Social Context

Between 2023 and 2024, Nigeria experienced an unprecedented rise in inflation, with rates reaching 29.9% in January and 35.4% in February 2024, while the naira depreciated to nearly ₦2,000 per USD. These conditions directly affected food availability and affordability, particularly in the North-East, where transport costs surged due to high fuel prices. Households across the region reported substituting nutritious food for cheaper alternatives, reducing meal frequency, and increasingly relying on food assistance programs. According to the Lean Season Food Security and Nutrition Crisis Multisector Plan (2023), about 43% of households in the North-East had inadequate food consumption in May 2023, a 2% increase over the previous year. Internally Displaced Persons (IDPs) and returnees showed the highest levels of food insecurity, with limited access to farmland and productive assets.

The results further indicate that these economic shocks were compounded by structural weaknesses in agricultural systems and governance. Poor infrastructure, inadequate farm inputs, and declining soil fertility continue to hinder productivity. Climate-induced flooding in 2022 destroyed large tracts of farmland and reduced harvests in 2023. The study also found that widespread corruption and bureaucratic inefficiency have diluted the impact of several poverty eradication programs, thereby perpetuating inequality and dependency.

Federal Government Interventions

The federal government has historically implemented a wide range of agricultural and social policies aimed at alleviating poverty and hunger. Earlier initiatives, such as the National Poverty Eradication Programme (2001), Root and Tuber Expansion Program (2008), and Agricultural Promotion Policy (2016–2020), were designed to boost productivity and reduce dependence on oil. These were later complemented by the

Economic Recovery and Growth Plan (2017–2020) and the National Agricultural Technology and Innovation Policy (2022–2027). The findings show that while these frameworks were well-designed on paper, their practical implementation was often hindered by inadequate funding, inconsistent political will, and weak monitoring systems.

Following the removal of fuel subsidies in 2023, President Tinubu declared a state of emergency on food insecurity and launched emergency measures to cushion the effects on citizens. Immediate strategies included securing farmlands, providing fertilizer and irrigation infrastructure, and mobilizing funds through the Central Bank of Nigeria for agricultural financing. The administration also formed a tripartite economic advisory committee to design recovery pathways and a minimum wage review committee to address the impact of inflation on workers. However, empirical data indicate that despite these interventions, inflation and food shortages persisted, suggesting limited short-term relief for vulnerable populations.

State-Level Findings

Borno State

The findings show that Borno State remains the most severely affected by conflict, displacement, and food insecurity. The Borno State Ministry of Agriculture and Natural Resources, in partnership with the Food and Agriculture Organization (FAO) and World Food Programme (WFP), developed the Food Security Sector (FSS) Strategy 2024–2026, aimed at aligning local interventions with the National Development Plan (2021–2025) and NATIP (2022–2027). The new policy seeks to integrate humanitarian assistance with long-term agricultural recovery. Key activities include supporting smallholder farmers, providing farm inputs, and enhancing post-harvest processing infrastructure.

However, field data reveal that insecurity and displacement continue to constrain access to farmland, particularly in rural areas surrounding Maiduguri, Dikwa, and Gwoza. As a result, reliance on aid remains high, with over 60% of households dependent on food distributions from humanitarian agencies. The FSS framework has improved coordination among actors but faces funding shortfalls and logistical challenges due to insecurity.

Adamawa State

In Adamawa State, the findings emphasize a relatively better agricultural environment but persistent economic hardship. The state's Food Security Sector Strategy (2024–2026) mirrors the Borno framework, focusing on resilience, recovery, and agricultural livelihood development. Despite fertile land and a strong agricultural base, the state faces recurrent flooding, herder–farmer conflicts, and rising production costs. The study

also highlights the One State One Product (OSOP) initiative, which prioritizes groundnut production as a key economic driver. This program has enhanced income generation and encouraged the establishment of small agro-processing enterprises.

In addition, the Social Protection Policy (2023) and Poverty Alleviation and Wealth Creation Agency (PAWECA) have provided vocational training, small business grants, and empowerment programs for youth and women. These initiatives have yielded moderate success in reducing unemployment and stimulating small-scale entrepreneurship, though inflationary pressures have eroded much of these gains. Respondents and secondary data alike emphasize that access to credit and the high cost of inputs remain major constraints to agricultural expansion in Adamawa.

Yobe State

Yobe State's results illustrate the compounding effects of conflict, inflation, and climate change on food availability. Joint assessments conducted by the World Food Programme (WFP) and the National Emergency Management Agency (NEMA) revealed a sharp decline in food access between 2016 and 2023. The findings show that households spend over 65% of their total income on food, and the state consistently ranks among Nigeria's most food-insecure regions. To mitigate this, the government implemented multiple empowerment and poverty alleviation programs, such as N-Power, Sure-P, and Microcredit Schemes (YouWin, which targeted vulnerable youth and women).

In 2023–2024, Yobe authorities intensified efforts to distribute food items and palliatives to cushion the impacts of subsidy removal. However, logistical and financial limitations curtailed coverage. Flooding and drought cycles further disrupted agricultural cycles, particularly in Jakusko, Bade, and Geidam Local Government Areas. The results indicate that while immediate relief was achieved, long-term food system resilience remains weak due to insecurity and infrastructural deficits.

Comparative Analysis

Comparative evaluation across the BAY States reveals both convergence and divergence in policy implementation and outcomes. All three states have aligned their strategies with federal frameworks such as NATIP (2022–2027) and the National Development Plan (2021–2025). However, their capacities to operationalize these frameworks vary. Borno's FSS has achieved stronger institutional coordination but faces the greatest humanitarian burden. Adamawa's diversified agricultural base offers better economic prospects but suffers from inflation and poor access to credit. Yobe exhibits the most fragile resilience, where repeated climate shocks and limited institutional capacity undermine progress.

The findings also underscore that state-level policies are often reactive rather than preventive—focused on short-term relief rather than structural transformation. Despite shared objectives to enhance agricultural productivity and social protection, limited integration between federal and state programs hinders cumulative impact. Furthermore, weak fiscal decentralization and overlapping mandates between ministries contribute to inefficiency.

Role of International and Non-Governmental Actors

The results show that international organizations and NGOs have played critical roles in bridging policy and implementation gaps. Programs by FAO, WFP, and UNDP have supported input distribution, nutrition monitoring, and livelihood restoration. Collaborative efforts under the Food Security Sector (FSS) have enhanced inter-agency coordination and data harmonization. For instance, the Lean Season Food Security Outlook (2023) facilitated real-time monitoring and early warning mechanisms that informed state-level planning. However, dependency on donor funding poses sustainability concerns. As donor priorities shift, local institutions must develop stronger capacity for autonomous program management and funding diversification.

Emerging Trends and Challenges

The study identifies several emerging trends shaping poverty and food security outcomes in the North-East:

1. **Economic Volatility:** The naira's continued depreciation and high inflation have eroded purchasing power and increased import dependency, exacerbating food shortages.
2. **Insecurity and Displacement:** Persistent insurgency restricts access to farmland, displaces populations, and disrupts market flows.
3. **Climate Variability:** Recurring floods and droughts destroy crops and reduce soil fertility.
4. **Weak Institutional Coordination:** Policy fragmentation and inconsistent implementation undermine program continuity.
5. **Gender and Youth Vulnerability:** Women and youth remain disproportionately affected due to limited access to land, capital, and employment opportunities.

These findings collectively demonstrate that addressing food insecurity in the BAY states requires systemic reforms integrating macroeconomic stabilization, governance improvement, and community-level resilience building.

DISCUSSION

Macroeconomic Reforms and Food Insecurity

The findings of this study confirm that macroeconomic reforms, particularly the removal of fuel subsidies and the devaluation of the naira, have directly intensified food insecurity among low-income households in Nigeria's North-East. As established in the results, rising transportation and production costs caused by subsidy removal sharply increased the prices of essential commodities, reducing household purchasing power. Simultaneously, currency devaluation escalated the cost of imported food and agricultural inputs, pushing inflation beyond 30% by early 2024. These dynamics have entrenched poverty in the BAY states, where dependence on subsistence agriculture and limited access to markets make communities highly vulnerable to economic shocks.

This outcome aligns with recent studies that document similar effects of economic liberalization in developing economies. Alipour et al. (2021) and Belachew et al. (2012) found that energy policy reforms, though fiscally justified, often trigger cascading effects on food affordability by increasing logistics costs and household expenditure shares on basic needs. Likewise, Eyre et al. (2021) and Medina-Hernandez et al. (2023) identified that devaluation-driven import costs in low-income countries correlate strongly with household food insecurity. Empirical comparisons with Bangladesh and Ethiopia demonstrate that subsidy removal and currency instability in fragile economies consistently lead to food shortages and malnutrition unless mitigated by social safety nets (Laraia et al., 2022; Lauren et al., 2021).

Theoretically, these findings illustrate how macroeconomic adjustments designed under rational policy frameworks may inadvertently produce social distortions. In the Rational Comprehensive Model of Decision-Making, such trade-offs between long-term efficiency and short-term welfare must be acknowledged and incorporated into reform design. Practically, this underscores the need for Nigeria to complement structural reforms with targeted cash transfers, subsidized farm inputs, and localized food programs that cushion immediate hardship. Policy-wise, integrating fiscal reforms with social protection mechanisms would prevent cyclical poverty, stabilize consumption patterns, and promote inclusive growth in vulnerable regions.

Decentralization and State-Level Policy Implementation

Results from Borno, Adamawa, and Yobe show that decentralized policymaking can yield context-specific strategies for poverty and food insecurity reduction. State-led frameworks such as Adamawa's *One State One Product* and Yobe's microcredit and empowerment schemes demonstrate how subnational governments adapt federal directives to local realities. However, disparities in capacity, resources, and governance

structures significantly affect implementation outcomes. The study found that while Borno's Food Security Sector (FSS) achieved strong coordination with international partners, limited funding and insecurity constrained results; Adamawa's diversification policies improved livelihoods but were undermined by inflation; and Yobe's programs provided temporary relief without long-term sustainability.

Comparative studies support these mixed outcomes. Research from Sierra Leone (Chapman & Yilmaz, 2014; Edwards et al., 2015; Edwards & Yilmaz, 2016) and Uganda (Johnson, 2023; Muriisa, 2021; Okidi & Guloba, 2006) highlights that decentralization enhances responsiveness in conflict-affected contexts but requires robust local institutions. Similarly, Azwar (2022) and Litami & Lutfi (2023) emphasize that, for Indonesian context, fiscal decentralization without governance reforms can deepen inequality across regions. Evidence from Indonesia the Philippines (Balisacan et al., 2008; Liwanag & Wyss, 2019; Mitchell & Bossert, 2010) further shows that successful decentralization depends on accountability and inter-agency coordination. These parallels suggest that Nigeria's challenges are not unique but stem from structural asymmetries between federal and state authorities, bureaucratic inefficiencies, and weak fiscal control.

From a policy standpoint, decentralization holds promises for improving program effectiveness if accompanied by governance reforms that ensure accountability and equitable resource allocation. Theoretically, the findings validate the governance-focused extensions of the Rational Comprehensive Model, which stresses institutional rationality alongside policy rationality. Practically, strengthening local fiscal autonomy, enhancing data-driven decision-making, and institutionalizing performance-based funding can improve the consistency and sustainability of decentralized food security initiatives across the BAY states.

Governance Quality, Institutional Coordination, and Corruption

The study reveals that governance deficits and institutional fragmentation are central obstacles to achieving food security and poverty reduction in Nigeria. Overlapping mandates among federal, state, and local institutions, coupled with corruption in program funding, undermine policy coherence and efficiency. Misallocation of agricultural subsidies, lack of transparency in social protection distribution, and limited monitoring capacity have eroded public trust and participation. This confirms the view that technical policy design alone is insufficient when governance quality is weak and institutional coordination is poor.

These findings align with prior research emphasizing governance as a determinant of development success. Adeyemi et al. (2023) and Onyiriuba et al. (2020) demonstrated that effective agricultural policy implementation correlates strongly with

institutional integrity and bureaucratic efficiency. Comparative insights from Rwanda (Franklin & Oehmke, 2019; Habimana & Haughton, 2022) and Ghana (Arkorful et al., 2022; Denny et al., 2024) further illustrate that anti-corruption mechanisms, accountability frameworks, and community oversight improve agricultural outcomes and social welfare. In contrast, Camillone et al. (2020) and Mafara (2022) highlight that corruption and policy inconsistency erode the effectiveness of interventions across Sub-Saharan Africa, reinforcing the pattern observed in Nigeria.

Theoretically, these results strengthen institutionalist interpretations of policy effectiveness within the Rational Comprehensive Model, highlighting how rational decisions require credible institutions to translate plans into outcomes. Practically, the findings suggest that Nigeria must embed anti-corruption mechanisms into agricultural financing, strengthen inter-ministerial coordination, and improve bureaucratic transparency. For policymakers, adopting digital tracking systems, open-budget frameworks, and community-based monitoring can ensure accountability and align program objectives with measurable outcomes, ultimately increasing public confidence in poverty alleviation and food security initiatives.

Integration of Humanitarian Assistance with Long-Term Recovery

A key finding from the study is that humanitarian relief remains heavily fragmented from long-term agricultural and economic recovery programs in the BAY states. Emergency food assistance by organizations such as WFP and FAO alleviates short-term hunger but rarely translates into structural recovery or sustainable livelihoods. The absence of strong institutional linkages between emergency relief and local agricultural policies perpetuates dependency and limits resilience. Integrating humanitarian efforts with long-term agricultural investment emerged as a necessary strategy to bridge this divide.

International evidence offers valuable parallels. Studies from Sierra Leone (McNamara, 2017), Uganda (Wairimu et al., 2016), and Rwanda (Nsabuwera et al., 2016) demonstrate that multi-sectoral collaboration, combining humanitarian support with agricultural extension services, fosters durable food security. Afghanistan's post-conflict recovery model (Madden et al., 2017) and Kosovo's governance reforms (Burkle, 2010) further underscore that coordination, resilience-building, and institutional reform are indispensable for successful recovery. Conversely, weak governance and donor dependency have hindered similar outcomes (Muscat, 2005).

These comparative insights underline crucial theoretical and practical implications. Conceptually, the findings support adaptive governance approaches that integrate the Rational Comprehensive Model with resilience theory, emphasizing iterative feedback between relief and recovery. Practically, Nigeria can adopt a "nexus

framework” that links humanitarian and development programming under shared monitoring indicators. Policy reforms should prioritize local participation, invest in climate-resilient agriculture, and strengthen cross-sectoral coordination to ensure that emergency interventions contribute to long-term socio-economic transformation rather than temporary relief.

Theoretical Evaluation through the Rational Comprehensive Model

Applying the Rational Comprehensive Model of Decision-Making to Nigeria’s poverty and food security policies reveals critical insights into the balance between short-term welfare interventions and long-term economic objectives. The model’s structured process, problem identification, generation of alternatives, evaluation of trade-offs, and feedback, offers an analytical lens for understanding how decisions such as fuel subsidy removal were economically rational but socially regressive. The study’s findings demonstrate that while such reforms aim to stabilize fiscal conditions, they often neglect immediate welfare needs, leading to heightened food insecurity and social unrest.

Empirical literature affirms these theoretical dynamics. Comparative cases from countries illustrate that integrating social protection with economic reforms enhances policy coherence (Brooks, 2002; Lemma & Cochrane, 2019; Picciotto, 2005; Scheil-Adlung, 2020) and mitigates trade-offs (Bosch & Campos-Vazquez, 2014; Hemerijck et al., 2023; Wenjuan & Zhao, 2023). Conversely, fragmented policies in Nigeria echo findings from Sumarto et al. (2014) and Islamiyah et al. (2021), which caution that neglecting participatory and adaptive feedback mechanisms can derail rational policy intentions. These studies collectively suggest that the Rational Comprehensive Model remains valid when complemented by institutional and social rationality, recognizing that human and contextual constraints limit purely economic optimization.

The implications extend across theoretical, practical, and policy domains. Theoretically, this study refines the Rational Comprehensive Model by illustrating how policy rationality in fragile economies must balance efficiency with equity and adaptability. Practically, it demonstrates that integrating short-term social safety nets with structural agricultural reforms yields more sustainable outcomes. At the policy level, embedding participatory mechanisms, transparent evaluation systems, and data-driven monitoring will enhance Nigeria’s capacity to design reforms that are not only rational in intent but equitable and resilient in impact.

Synthesis and Broader Implications

Overall, the discussion affirms that Nigeria’s poverty and food insecurity challenges are rooted in interdependent economic, institutional, and governance dimensions. Macroeconomic reforms, while rationally justified, have unintended consequences for

vulnerable households. Decentralization provides opportunities for localized solutions but remains constrained by uneven governance quality and corruption. Moreover, humanitarian efforts remain insufficiently aligned with long-term recovery strategies, leading to cyclical dependency rather than structural transformation. These findings underscore the importance of harmonizing short-term social interventions with long-term development frameworks within a coherent governance system.

The convergence of evidence from both domestic and international contexts reinforces the central argument that effective poverty and food security policies require multi-dimensional integration, economic, institutional, and social. Theoretically, this study contributes to literature by operationalizing the Rational Comprehensive Model in a real-world, conflict-affected context, demonstrating its utility and limitations in policy evaluation. Practically, the findings advocate for Nigeria to institutionalize coordination between federal and state governments, strengthen accountability mechanisms, and embed resilience-building into agricultural programs.

This discussion bridges empirical results with theoretical insight, offering a nuanced understanding of how rational policymaking interacts with governance realities. By aligning macroeconomic prudence with social inclusion and institutional accountability, Nigeria can progress toward sustainable poverty reduction and food security in its most fragile regions.

CONCLUSION

This study examined the intersection of government policy, macroeconomic reform, and institutional governance in addressing poverty and food insecurity in Nigeria's North-East, focusing on the BAY states—Borno, Adamawa, and Yobe. The findings reveal that despite numerous federal and state interventions, poverty and hunger persist due to weak governance, policy inconsistency, and systemic economic shocks such as fuel subsidy removal, inflation, and currency depreciation. These macroeconomic adjustments, though designed for long-term fiscal stability, intensified short-term deprivation by inflating food prices and eroding household purchasing power. The analysis underscores that sustainable food security requires coherent policies that integrate economic efficiency with social welfare protection.

Comparative evidence and theoretical analysis through the Rational Comprehensive Model highlight that Nigeria's policy failures stem not from poor design but from institutional and operational inefficiencies. While decentralization and international partnerships have enhanced localized interventions, their effectiveness remains limited by corruption, overlapping mandates, and poor coordination. The study demonstrates that integrating humanitarian aid with agricultural recovery and social

protection yields more durable outcomes than isolated policy responses. It also reinforces that adaptive and participatory governance structures are essential for translating rational policy frameworks into tangible welfare improvements in fragile regions.

This research contributes to the scholarly discourse by empirically connecting macroeconomic reform, governance quality, and food insecurity within a unified analytical framework. It advances the application of the Rational Comprehensive Model to developing contexts, emphasizing the need for rationality grounded in institutional and social realities. Beyond its theoretical value, the study offers practical implications for policymakers seeking to design integrated, equity-oriented, and evidence-based poverty alleviation strategies. Future efforts must prioritize fiscal stability without compromising human security, ensuring that reform processes align economic objectives with inclusive social development.

Limitation of the Study

This study is primarily limited by its reliance on secondary data and documentary sources due to restricted access to conflict-affected regions. The security situation in the BAY states, especially in rural Borno and Yobe, prevented direct field observation and interviews, thereby limiting the capacity to capture first-hand perspectives from affected populations. Consequently, the analysis depended on existing datasets, institutional reports, and verified publications, which may vary in accuracy or completeness. Another limitation concerns the absence of longitudinal field data to assess long-term policy impacts. Given the dynamic nature of Nigeria's economy and governance, findings represent a temporal snapshot rather than a continuous evaluation of policy outcomes.

Furthermore, the study's qualitative approach emphasizes interpretive synthesis over statistical generalization. While this method provides contextual richness, it restricts quantitative validation of causal relationships between policy interventions and socio-economic indicators. The geographic focus on the BAY states, though analytically significant, also narrows the generalizability of conclusions to other regions of Nigeria. Nonetheless, the triangulation of credible secondary sources and the integration of comparative evidence strengthen the reliability of findings. Future research employing mixed methods and longitudinal tracking could provide deeper empirical validation and broader policy insights.

Recommendations for Future Research

Future studies should employ mixed-methods designs that integrate qualitative insights with quantitative measurements to capture both policy processes and measurable welfare outcomes. Field-based surveys, focus group discussions, and

participatory rural appraisals would enrich understanding of how local communities perceive and experience poverty alleviation programs. Comparative analyses across Nigeria's six geopolitical zones could further illuminate regional variations in policy effectiveness, providing a more holistic national perspective. Longitudinal studies are also needed to track how macroeconomic reforms, particularly subsidy removal and currency policy, affect household food security over time.

Scholars should explore the institutional and behavioral dimensions of policymaking, focusing on governance quality, bureaucratic efficiency, and corruption dynamics in public spending. Integrating resilience theory with the Rational Comprehensive Model could offer new conceptual tools for analyzing adaptive governance in fragile states. Additionally, future research should investigate the role of digital technology, agricultural innovation, and financial inclusion in enhancing food system resilience. International comparative research, especially with post-conflict countries in Sub-Saharan Africa and Southeast Asia, would provide valuable cross-learning for policy refinement. Ultimately, future inquiry must advance beyond descriptive analysis toward evaluative, solution-oriented research that informs the design of inclusive, transparent, and sustainable strategies for eradicating poverty and achieving long-term food security in Nigeria.

Author Contributions

Conceptualization: S.A. & A.H.; Data curation: S.A. & A.H.; Formal analysis: S.A. & A.H.; Funding acquisition: S.A. & A.H.; Investigation: S.A. & A.H.; Methodology: S.A. & A.H.; Project administration: S.A. & A.H.; Resources: S.A. & A.H.; Software: S.A. & A.H.; Supervision: S.A. & A.H.; Validation: S.A. & A.H.; Visualization: S.A. & A.H.; Writing – original draft: S.A. & A.H.; Writing – review & editing: S.A. & A.H. All authors have read and agreed to the published version of the manuscript.

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Informed Consent Statement

Informed consent was not required for this study.

Data Availability Statement

The data presented in this study are available on request from the corresponding author. The data are not publicly available due to institution's policy.

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Conflicts of Interest

The authors declare no conflicts of interest.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

During the preparation of this work the authors used ChatGPT, Grammarly, and PaperPal to improve clarity of the language and readability of the article. After using these tools, the authors reviewed and edited the content as needed and took full responsibility for the content of the published article.

REFERENCES

- Abdullahi, S. A., Smelyanskaya, M., John, S., Adamu, H. I., Ubochioma, E., Kennedy, I., Abubakar, F. A., Ago, H. A., Stevens, R., & Creswell, J. (2020). Providing TB and HIV outreach services to internally displaced populations in Northeast Nigeria: Results of a controlled intervention study. *PLOS Medicine*, 17(9), e1003218. <https://doi.org/10.1371/journal.pmed.1003218>
- Abdulwaliyu, I., Okoduwa, S. I. R., Arekemase, S. O., & Batari, M. L. (2023). Conceptual triple E model for sustainable food security: A solution-based framework for hunger and malnutrition in Nigeria. *World Nutrition*, 14(4), 56–62. <https://doi.org/10.26596/wn.202314456-62>
- Abubakar, S. G., Mutalib, Y. O., & Abubakar, M. Z.-U.-R. (2019). Impact of food security initiative on sustainable development in North Eastern Nigeria. *Review of Politics and Public Policy in Emerging Economies*, 1(1), 1–16. <https://doi.org/10.26710/rope.vi1i1.1126>
- Adebisi, L. O., Adebisi, O. A., Jonathan, A., Oludare, O. T., & Odum, E. E.-B. (2022). Effect of climate smart agricultural practices on food security among farming households in Kwara State, North-Central Nigeria. *Pesquisa Agropecuária Tropical*, 52, e70538. <https://doi.org/10.1590/1983-40632022v5270538>
- Adeleke, R., Alabede, O., Joel, M., & Ashibuogwu, E. (2023). Exploring the geographical variations and influencing factors of poverty in Nigeria. *Regional Science Policy & Practice*, 15(6), 1182–1198. <https://doi.org/10.1111/rsp3.12621>
- Adepoju, A., & Obialo, A. (2022). Agricultural labour productivity growth and food insecurity transitions among maize farming households in rural Nigeria. *Ekonomika Poljoprivrede*, 69(4), 1093–1107. <https://doi.org/10.5937/ekoPolj2204093A>
- Adeyemi, O., Adesiyun, Y., Omenka, S., Ezekannagha, O., Adanlawo, A., Oyeleke, R., Umunna, L., Aminu, F., Onabolu, A., & Ajieroh, V. (2023). Government budget for nutrition-sensitive agriculture in Nigeria increased following development of related strategy. *Food and Nutrition Bulletin*, 44(1_suppl), S103–S114. <https://doi.org/10.1177/03795721231179783>
- Ahmed, A., Bakhtiar, M. M., Gilligan, D. O., Hoddinott, J., & Roy, S. (2023). Private transfers, public transfers, and food insecurity during the time of COVID-19: Evidence from Bangladesh. *Applied Economic Perspectives and Policy*, 45(4), 1901–1921. <https://doi.org/10.1002/aepp.13373>
- Aiyedogbon, J. O., Anyanwu, S. O., Isa, G. H., Petrushenko, Y., & Zhuravka, O. (2022). Population growth and food security: Evidence from Nigeria. *Problems and Perspectives in Management*, 20(2), 402–410. [https://doi.org/10.21511/ppm.20\(2\).2022.33](https://doi.org/10.21511/ppm.20(2).2022.33)

- Akintunde, Y. W., Oyegoke, E. O., Jelilov, G., & Haruna, T. M. (2019). Determinants of exchange rate in Nigeria: A comparison of the official and parallel market rates. *The Economics and Finance Letters*, 6(2), 178–188. <https://doi.org/10.18488/journal.29.2019.62.178.188>
- Akumbom, P., Egwu, M. J. B., & Shillie, P. N. (2023). Enhancing agriprenurship and agricultural technology adoption to reduce poverty: Opinions from small venture holders in Tubah Sub-Division, Western Highlands, Cameroon. *Business Perspective Review*, 5(1), 59–74. <https://doi.org/10.38157/bpr.v5i1.548>
- Alipour, V., Rezapour, A., Shali, M., & Harati Khalilabad, T. (2021). Elderly's food security and its associated socioeconomic determinants in Tehran: A cross-sectional study. *Health Science Reports*, 4(1), e240. <https://doi.org/10.1002/hsr2.240>
- Aliyu, U. S., Ozdeser, H., Çavuşoğlu, B., & Usman, M. A. M. (2021). Food security sustainability: A synthesis of the current concepts and empirical approaches for meeting SDGs. *Sustainability*, 13(21), 11728. <https://doi.org/10.3390/su132111728>
- Amalu, N. S. (2016). Impact of Boko Haram insurgency on human security in Nigeria. *Global Journal of Social Sciences*, 14(1), 35–42. <https://doi.org/10.4314/gjss.v14i1.4>
- Arema, B. I., Ofomezie, K. E., & Omoniyi, B. B. (2023). Corruption and poverty: The Nigerian experience (1999–2021). *European Modern Studies Journal*, 7(2), 133–142. [https://doi.org/10.59573/emsj.7\(2\).2023.13](https://doi.org/10.59573/emsj.7(2).2023.13)
- Arkorful, V. E., Abdul-Rahaman, N., Ibrahim, H. S., & Arkorful, V. A. (2022). Fostering trust, transparency, satisfaction and participation amidst COVID-19 corruption: Does the civil society matter? – Evidence from Ghana. *Public Organization Review*, 22(4), 1191–1215. <https://doi.org/10.1007/s11115-021-00590-w>
- Asongu, S. A., & Kodila-Tedika, O. (2017). Is poverty in the African DNA (gene)? *South African Journal of Economics*, 85(4), 533–552. <https://doi.org/10.1111/saje.12165>
- Azwar, A. (2022). The impact of fiscal decentralization on the efficiency of health expenditure and welfare: Case study of South Sulawesi Province. *Patria Artha Journal of Accounting & Financial Reporting*, 6(2), 127–158. <https://doi.org/10.33857/jafr.v6i2.625>
- Balisacan, A. M., Hill, H., & Piza, S. F. (2008). Regional development dynamics and decentralization in the Philippines: Ten lessons from a “fast starter.” *Asean Economic Bulletin*, 25(3), 293–315. <https://doi.org/10.1355/AE25-3D>
- Bansal, P. (Tima), Smith, W. K., & Vaara, E. (2018). New ways of seeing through qualitative research. *Academy of Management Journal*, 61(4), 1189–1195. <https://doi.org/10.5465/amj.2018.4004>
- Barbier, E. B., & Hochard, J. P. (2018). Poverty, rural population distribution and climate change. *Environment and Development Economics*, 23(3), 234–256. <https://doi.org/10.1017/S1355770X17000353>
- Barrett, C. B. (2001). Does food aid stabilize food availability? *Economic Development and Cultural Change*, 49(2), 335–349. <https://doi.org/10.1086/452505>
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). The University of Chicago Press.
- Belachew, T., Lindstrom, D., Gebremariam, A., Jira, C., Hattori, M. K., Lachat, C., Huybregts, L., & Kolsteren, P. (2012). Predictors of chronic food insecurity among adolescents in Southwest Ethiopia: A longitudinal study. *BMC Public Health*, 12(1), 604. <https://doi.org/10.1186/1471-2458-12-604>

- Bosch, M., & Campos-Vazquez, R. M. (2014). The trade-offs of welfare policies in labor markets with informal jobs: The case of the “seguro popular” program in Mexico. *American Economic Journal: Economic Policy*, 6(4), 71–99. <https://doi.org/10.1257/pol.6.4.71>
- Brooks, S. M. (2002). Social protection and economic integration: The politics of pension reform in an era of capital mobility. *Comparative Political Studies*, 35(5), 491–523. <https://doi.org/10.1177/0010414002035005001>
- Burkle, F. M. (2010). Post-conflict health system recovery: The case of Kosovo. *Prehospital and Disaster Medicine*, 25(1), 34–36. <https://doi.org/10.1017/S1049023X00007639>
- Camillone, N., Duiker, S., Bruns, M., Onyibe, J., & Omotayo, A. (2020). Context, challenges, and prospects for agricultural extension in Nigeria. *Journal of International Agricultural and Extension Education*, 27(4), 144–156. <https://doi.org/10.5191/jiaee.2020.274144>
- Capretti, L., Saha, A., Jena, F., & Dzanku, F. M. (2022). *Agricultural technology, food security and nutrition: Insight from oil palm smallholders in Ghana* (APRA Working Paper No. 95). APRA, Future Agricultures Consortium. <https://doi.org/10.19088/APRA.2022.041>
- Chapman, E. W., & Yilmaz, S. (2014). *Decentralization, accountability and local services in Sierra Leone: Situation analysis, key challenges and opportunities for reform*. World Bank Group. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/495621468167372129>
- Chen, S., & Ravallion, M. (2000). *How did the world's poorest fare in the 1990s?* World Bank, Washington, DC. <https://doi.org/10.1596/1813-9450-2409>
- Cordes, D. L., & Morrison, G. (2023). The circular economy, big data analytics, and the transformation of urban slums in Sub-Saharan Africa. *International Journal of Smart Sensor Technologies and Applications*, 2(1), 1–27. <https://doi.org/10.4018/IJSSSTA.319720>
- Dada, J. T., & Akinlo, T. (2021). Foreign direct investment and poverty reduction in Sub-Saharan Africa: Does environmental degradation matter? *Future Business Journal*, 7(1), 21. <https://doi.org/10.1186/s43093-021-00068-7>
- Dasgupta, S., & Robinson, E. J. Z. (2021). Food insecurity, safety nets, and coping strategies during the COVID-19 pandemic: Multi-country evidence from Sub-Saharan Africa. *International Journal of Environmental Research and Public Health*, 18(19), 9997. <https://doi.org/10.3390/ijerph18199997>
- De Milliano, M., & Plavgo, I. (2018). Analysing multidimensional child poverty in Sub-Saharan Africa: Findings using an international comparative approach. *Child Indicators Research*, 11(3), 805–833. <https://doi.org/10.1007/s12187-017-9488-1>
- Denny, E. K., Phan, N., Romero, D., & Wibbels, E. (2024). Incentives, audits and procurement: Evidence from a district-level field experiment in Ghana. *Governance*, 37(3), 729–750. <https://doi.org/10.1111/gove.12798>
- Denué, B., Akawu, C., Kwayabura, S., & Kida, I. (2018). Low case fatality during 2017 cholera outbreak in Borno State, North Eastern Nigeria. *Annals of African Medicine*, 17(4), 203–209. https://doi.org/10.4103/aam.aam_66_17
- Driver, S., Gray, S., Sikhondze, W., Awuonda, K., Wilcox, H., Segrt, A., Pandya, L., Roth, J., Makanga, M., & Lang, T. (2022). The European & Developing Countries Clinical Trials Partnership (EDCTP) Knowledge Hub: Developing an open platform for facilitating high-quality clinical research. *Trials*, 23(1), 374. <https://doi.org/10.1186/s13063-022-06311-y>

- Echendu, A. J. (2022). Flooding, food security and the sustainable development goals in Nigeria: An assemblage and systems thinking approach. *Social Sciences*, 11(2), 59. <https://doi.org/10.3390/socsci11020059>
- Edwards, B., & Yilmaz, S. (2016). Decentralization as a post-conflict stabilization tool: The case of Sierra Leone. *Public Administration and Development*, 36(5), 347–358. <https://doi.org/10.1002/pad.1784>
- Edwards, B., Yilmaz, S., & Boex, J. (2015). Decentralization as a post-conflict strategy: Local government discretion and accountability in Sierra Leone. *Public Administration and Development*, 35(1), 46–60. <https://doi.org/10.1002/pad.1707>
- Eneji, R. I., & Akwaji, F. (2018). Evolution, strategies and problems of poverty-alleviating agricultural policies and programmes in Nigeria. *Advances in Applied Sociology*, 08(12), 699–720. <https://doi.org/10.4236/aasoci.2018.812042>
- Eyre, R. W., House, T., Xavier Gómez-Olivé, F., & Griffiths, F. E. (2021). Bayesian belief network modelling of household food security in rural South Africa. *BMC Public Health*, 21(1), 935. <https://doi.org/10.1186/s12889-021-10938-y>
- Fagbemi, F., Oladejo, B., & Adeosun, O. A. (2020). The effectiveness of poverty alleviation policy: Why is the quality of institutions the bane in Nigeria? *Review of Development and Change*, 25(2), 215–236. <https://doi.org/10.1177/0972266120975262>
- Ferraro, P. J., Hanauer, M. M., & Sims, K. R. E. (2011). Conditions associated with protected area success in conservation and poverty reduction. *Proceedings of the National Academy of Sciences*, 108(34), 13913–13918. <https://doi.org/10.1073/pnas.1011529108>
- Folorunso, S. A., Osinubi, T. T., Ojo, O. O., & Folorunso, M. A. (2020). COVID-19 pandemic on macroeconomic dynamics in Nigeria: An assessment. *African Journal of Sustainable Development*, 10(3), 113–129. <https://www.ajol.info/index.php/ajsd/article/view/220241>
- Franklin, K., & Oehmke, J. (2019). Building African agribusiness through trust and accountability. *Journal of Agribusiness in Developing and Emerging Economies*, 9(1), 22–43. <https://doi.org/10.1108/JADEE-01-2018-0005>
- Fukuda-Parr, S. (2003). The Human Development Paradigm: Operationalizing Sen's ideas on capabilities. *Feminist Economics*, 9(2–3), 301–317. <https://doi.org/10.1080/1354570022000077980>
- Fukuda-Parr, S. (2011). Theory and policy in international development: Human Development and Capability Approach and the Millennium Development Goals. *International Studies Review*, 13(1), 122–132. <https://doi.org/10.1111/j.1468-2486.2010.01003.x>
- Garcia, D., & Gluesing, J. C. (2013). Qualitative research methods in international organizational change research. *Journal of Organizational Change Management*, 26(2), 423–444. <https://doi.org/10.1108/09534811311328416>
- Habimana, D., & Haughton, J. (2022). Does Rwanda's flagship microcredit programme boost agriculture and incomes? *African Journal of Agricultural and Resource Economics*, 17(3), 239–254. [https://doi.org/10.53936/afjare.2022.17\(3\).16](https://doi.org/10.53936/afjare.2022.17(3).16)
- Hailu, A. G., & Amare, Z. Y. (2022). Impact of productive safety net program on food security of beneficiary households in western Ethiopia: A matching estimator approach. *PLOS ONE*, 17(1), e0260817. <https://doi.org/10.1371/journal.pone.0260817>

- Heger, M. P., Zens, G., & Bangalore, M. (2020). Land and poverty: The role of soil fertility and vegetation quality in poverty reduction. *Environment and Development Economics*, 25(4), 315–333. <https://doi.org/10.1017/S1355770X20000066>
- Hemerijck, A., Ronchi, S., & Plavgo, I. (2023). Social investment as a conceptual framework for analysing well-being returns and reforms in 21st century welfare states. *Socio-Economic Review*, 21(1), 479–500. <https://doi.org/10.1093/ser/mwac035>
- Higgins, J. P. T., Green, S., & Scholten, R. J. (2008). Maintaining reviews: Updates, amendments and feedback. In J. P. T. Higgins & S. Green (Eds.), *Cochrane handbook for systematic reviews of interventions* (pp. 31–49). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9780470712184.ch3>
- Idakwo, D. A., OladiMeji, Y. U., Ayanlere, A. F., & Hussaini, A. S. (2022). Effects of COVID-19 induced spike in food prices on urban households' food security in Northwest, Nigeria. *Alanya Akademik Bakış*, 6(3), 3009–3028. <https://doi.org/10.29023/alanyaakademik.1099349>
- Islamiyah, R., Haning, Moh. T., & Hidayat, A. R. (2021). Adaptive Policies in the Family Hope Program (PKH) to achieve Sustainable Development Goals in Pangkep Regency. *JAKPP (Jurnal Analisis Kebijakan & Pelayanan Publik)*, 7(2), 81–97. <https://doi.org/10.31947/jakpp.v7i2.13971>
- Johnson, M. L. (2023). The role of decentralization in local government empowerment and effective service delivery: A case study in Uganda. *International Journal For Multidisciplinary Research*, 5(6), 8863. <https://doi.org/10.36948/ijfmr.2023.v05i06.8863>
- Kamta, F. N., Schilling, J., & Scheffran, J. (2020). Insecurity, resource scarcity, and migration to camps of internally displaced persons in Northeast Nigeria. *Sustainability*, 12(17), 6830. <https://doi.org/10.3390/su12176830>
- Kamta, F. N., Schilling, J., & Scheffran, J. (2021). Water resources, forced migration and tensions with host communities in the Nigerian part of the Lake Chad Basin. *Resources*, 10(4), 27. <https://doi.org/10.3390/resources10040027>
- Kawiti, M. N., & Okello, G. (2023). Internal appraisal and performance of national non-governmental organizations in the health sector in Kenya. *The University Journal*, 4(2), 149–161. <https://doi.org/10.59952/tuj.v4i2.143>
- Khan, A., & Cheri, L. (2016). An examination of poverty as the foundation of crisis in Northern Nigeria. *Insight on Africa*, 8(1), 59–71. <https://doi.org/10.1177/0975087815612283>
- Kowalska, A., Budzyńska, A., & Białowś, T. (2022). Food export restrictions during the COVID-19 pandemic: Real and potential effects on food security. *International Journal of Management and Economics*, 58(4), 409–424. <https://doi.org/10.2478/ijme-2022-0023>
- Kuhumba, S. K. (2017). Amartya Sen's capability approach as theoretical foundation of human development. *Journal of Sociology and Development*, 1(1), 127–145. <https://www.ajol.info/index.php/jsd/article/view/216336>
- Laraia, B. A., Gamba, R., Saraiva, C., Dove, M. S., Marchi, K., & Braveman, P. (2022). Severe maternal hardships are associated with food insecurity among low-income/lower-income women during pregnancy: Results from the 2012–2014 California maternal infant health assessment. *BMC Pregnancy and Childbirth*, 22(1), 138. <https://doi.org/10.1186/s12884-022-04464-x>
- Lauren, B. N., Silver, E. R., Faye, A. S., Rogers, A. M., Woo-Baidal, J. A., Ozanne, E. M., & Hur, C. (2021). Predictors of households at risk for food insecurity in the United States during the COVID-19 pandemic. *Public Health Nutrition*, 24(12), 3929–3936. <https://doi.org/10.1017/S1368980021000355>

- Lemma, M. D., & Cochrane, L. (2019). Policy coherence and social protection in Ethiopia: Ensuring no one is left behind. *Societies*, 9(1), 19. <https://doi.org/10.3390/soc9010019>
- L'Huillier, B. M. (2016). Has globalization failed to alleviate poverty in Sub-Saharan Africa? *Poverty & Public Policy*, 8(4), 368–386. <https://doi.org/10.1002/pop4.158>
- Li, Z., & Qamruzzaman, Md. (2023). Nexus between environmental degradation, clean energy, financial inclusion, and poverty: Evidence with DSUR, CUP-FM, and CUP-BC estimation. *Sustainability*, 15(19), 14161. <https://doi.org/10.3390/su151914161>
- Litami, F. P., & Lutfi, A. (2023). Special autonomy fund as implementation of special autonomy policy Aceh. *Return: Study of Management, Economic and Bussines*, 2(12), 1199–1207. <https://doi.org/10.57096/return.v2i12.183>
- Liwanag, H. J., & Wyss, K. (2019). Optimising decentralisation for the health sector by exploring the synergy of decision space, capacity and accountability: Insights from the Philippines. *Health Research Policy and Systems*, 17(1), 4. <https://doi.org/10.1186/s12961-018-0402-1>
- Madden, N. M., Pannkuk, C. D., & Klein, L. R. (2017). Post-conflict rebuilding of Afghanistan's agricultural extension system. In P. E. McNamara & A. Moore (Eds.), *Building agricultural extension capacity in post-conflict settings* (1st ed., pp. 151–166). CABI. <https://doi.org/10.1079/9781786390592.0151>
- Mafara, S. A. (2022). Constraints to wheat production in Bakolori Irrigation Scheme Zamfara State, Nigeria. *Arid-Zone Journal of Basic & Applied Research*, 1(5), 37–51. <https://doi.org/10.55639/607wqke>
- Maksum, A., Alimuddin, S. Z., Sahide, A., Muhammad, A., & Ma'arif, H. M. A. (2023). Agriculture and international organization in Indonesia: The Twitter analysis of FAO Indonesia. *E3S Web of Conferences*, 444, 01001. <https://doi.org/10.1051/e3sconf/202344401001>
- McNamara, P. E. (2017). Strengthening agriculture extension in post-war Sierra Leone: Progress and prospects for increased extension impact. In P. E. McNamara & A. Moore (Eds.), *Building agricultural extension capacity in post-conflict settings* (pp. 23–34). CABI. <https://doi.org/10.1079/9781786390592.0023>
- Medina-Hernandez, E. J., Barco-Llerena, E., & Marbello-Yepes, K. J. (2023). Food security in the world: Disparities and opportunities by country income levels. *Studies in Agricultural Economics*, 125(3), 127–135. <https://doi.org/10.7896/j.2554>
- Mitchell, A., & Bossert, T. J. (2010). Decentralisation, governance and health-system performance: 'Where you stand depends on where you sit.' *Development Policy Review*, 28(6), 669–691. <https://doi.org/10.1111/j.1467-7679.2010.00504.x>
- Mogess, Y. K., Eshete, Z. S., & Alemaw, A. T. (2023). Economic growth and poverty reduction: Evidence from Sub-Saharan African (SSA) countries. *Poverty & Public Policy*, 15(2), 251–278. <https://doi.org/10.1002/pop4.364>
- Moyer, J. D., Verhagen, W., Mapes, B., Bohl, D. K., Xiong, Y., Yang, V., McNeil, K., Solórzano, J., Irfan, M., Carter, C., & Hughes, B. B. (2022). How many people is the COVID-19 pandemic pushing into poverty? A long-term forecast to 2050 with alternative scenarios. *PLOS One*, 17(7), e0270846. <https://doi.org/10.1371/journal.pone.0270846>
- Muriisa, R. K. (2021). Decentralisation in Uganda: Prospects for improved service delivery. *Africa Development*, 33(4), 83–95. <https://doi.org/10.4314/ad.v33i4.57344>

- Muscat, R. J. (2005). Reviving Agriculture in the Aftermath of Violent Conflict: A Review of Experience. *Journal of Peacebuilding & Development*, 2(2), 77–92. <https://doi.org/10.1080/15423166.2005.236946437876>
- Nissanke, M., & Sindzingre, A. (2006). Institutional foundations for shared growth in Sub-Saharan Africa. *African Development Review*, 18(3), 353–391. <https://doi.org/10.1111/j.1467-8268.2006.00149.x>
- Nsabuwerwa, V., Hedt-Gauthier, B., Khogali, M., Edginton, M., Hinderaker, S. G., Nisingizwe, M. P., Tihabyona, J. D. D., Sikubwabo, B., Sembagare, S., Habinshuti, A., & Drobac, P. (2016). Making progress towards food security: Evidence from an intervention in three rural districts of Rwanda. *Public Health Nutrition*, 19(7), 1296–1304. <https://doi.org/10.1017/S1368980015002207>
- Nwozor, A., Olanrewaju, J. S., & Ake, M. B. (2019). National insecurity and the challenges of food security in Nigeria. *Academic Journal of Interdisciplinary Studies*, 8(4), 9–20. <https://doi.org/10.36941/ajis-2019-0032>
- Oduntan, O., & Loy, J.-P. (2022). Effect of resource productivity of maize-based farmers on poverty reduction in South West, Nigeria. *Journal of Economics and Sustainable Development*, 13(20), 67. <https://iiste.org/Journals/index.php/JEDS/article/view/59767>
- Ogbonna, C. C., & Ruiz Jiménez, J. Á. (2017). The inordinate activities of Boko Haram: A critical review of facts and challenges. *RIPS: Revista de Investigaciones Políticas y Sociológicas*, 16(2), 9–24. <https://doi.org/10.15304/rips.16.2.3962>
- Ogunniyi, A. I., Omotoso, S. O., Salman, K. K., Omotayo, A. O., Olagunju, K. O., & Aremu, A. O. (2021). Socio-economic drivers of food security among rural households in Nigeria: Evidence from smallholder maize farmers. *Social Indicators Research*, 155(2), 583–599. <https://doi.org/10.1007/s11205-020-02590-7>
- Okidi, J. A., & Guloba, M. (2006). *Decentralization and development: Emerging issues from Uganda's experience*. <https://doi.org/10.22004/AG.ECON.93810>
- Okopi, S. (2022). Management of agricultural innovations: Implications on food security in Nigeria. *European Journal of Business and Innovation Research*, 10(7), 15–30. <https://doi.org/10.37745/ejbir.2013/vol10n71530>
- Okunola, A. M., & Ojo, O. S. (2019). Household poverty measurement and its determinants among rural farmers in Ondo State, Nigeria. *Poverty & Public Policy*, 11(4), 277–290. <https://doi.org/10.1002/pop4.262>
- Olanrewaju, O., & Balana, B. B. (2023). Conflict-induced shocks and household food security in Nigeria. *Sustainability*, 15(6), 5057. <https://doi.org/10.3390/su15065057>
- Olaoye, O. O. (2023). Interrogating Sub-Saharan Africa's high economic growth rate and low poverty reduction rate: A poverty paradox? *Journal of Public Affairs*, 23(1), e2851. <https://doi.org/10.1002/pa.2851>
- Omodero, C. O., & Ehikioya, B. I. (2022). Agricultural financing to guarantee food safety in an emerging nation: A case study of Nigeria. *Business: Theory and Practice*, 23(1), 53–59. <https://doi.org/10.3846/btp.2022.13092>
- Omoniyi, B. B. (2018). An examination of the causes of poverty on economic growth in Nigeria. *Africa's Public Service Delivery and Performance Review*, 6(1), a175. <https://doi.org/10.4102/apspdpr.v6i1.175>

- Onuoha, O. J., Sakanko, M. A., Baba, S., & Moses, A. B. (2023). The agricultural value chains and poverty reduction: Assessment of Nigeria. *Lapai Journal of Economics*, 7(1), 1–14. <https://doi.org/10.4314/lje.v7i1.1>
- Onyiriuba, L., Okoro, E. U. O., & Ibe, G. I. (2020). Strategic government policies on agricultural financing in African emerging markets. *Agricultural Finance Review*, 80(4), 563–588. <https://doi.org/10.1108/AFR-01-2020-0013>
- Orie, E. G. (2021). Climate change adaptation mechanism for Sustainable Development Goal 1 in Nigeria: Legal imperative. In N. Oguge, D. Ayal, L. Adeleke, & I. Da Silva (Eds.), *African handbook of climate change adaptation* (pp. 1897–1917). Springer International Publishing. https://doi.org/10.1007/978-3-030-45106-6_81
- Osabohien, R., Ufua, D., Moses, C. L., & Osabuohien, E. (2020). Accountability in agricultural governance and food security in Nigeria. *Brazilian Journal of Food Technology*, 23, e2019089. <https://doi.org/10.1590/1981-6723.08919>
- Oteros-Rozas, E., Ruiz-Almeida, A., Aguado, M., González, J. A., & Rivera-Ferre, M. G. (2019). A social–ecological analysis of the global agrifood system. *Proceedings of the National Academy of Sciences*, 116(52), 26465–26473. <https://doi.org/10.1073/pnas.1912710116>
- Oyetunde–Usman, Z., & Olagunju, K. O. (2019). Determinants of food security and technical efficiency among agricultural households in Nigeria. *Economies*, 7(4), 103. <https://doi.org/10.3390/economies7040103>
- Picciotto, R. (2005). The evaluation of policy coherence for development. *Evaluation*, 11(3), 311–330. <https://doi.org/10.1177/1356389005058479>
- Pillarisetti, J. R., Lawrey, R., & Radel, K. (2007). GM crops in Sub-Saharan Africa: A critical comment on GTAP modelling. *International Journal of Social Economics*, 34(3), 188–196. <https://doi.org/10.1108/03068290710726739>
- Rabiu, M. M., Aliyu, Y. M., & Tidy, A. S. (2022). Analysis of the effect of insurgency on food crop production in Gaidam local government area of Yobe State, Nigeria. *Journal of Agripreneurship and Sustainable Development*, 5(3), 23–32. <https://doi.org/10.59331/jasd.v5i3.331>
- Rocheftort, G., Lapointe, A., Mercier, A.-P., Parent, G., Provencher, V., & Lamarche, B. (2021). A rapid review of territorialized food systems and their impacts on human health, food security, and the environment. *Nutrients*, 13(10), 3345. <https://doi.org/10.3390/nu13103345>
- Saidi, Y., Labidi, M. A., & Ochi, A. (2023). Economic growth and extreme poverty in Sub-Saharan African countries: Non-linearity and governance threshold effect. *Journal of the Knowledge Economy*, 15(2), 7819–7851. <https://doi.org/10.1007/s13132-023-01421-7>
- Scheil-Adlung, X. (2020). Focusing on policy coherence to achieve UHC: The social protection floor approach. *Global Social Policy*, 20(2), 225–230. <https://doi.org/10.1177/1468018120935715>
- Skarbek, D. (2020). Qualitative research methods for institutional analysis. *Journal of Institutional Economics*, 16(4), 409–422. <https://doi.org/10.1017/S174413741900078X>
- Strang, K. D., Che, F., & Vajjhala, N. R. (2020). Urgently strategic insights to resolve the Nigerian food security crisis. *Outlook on Agriculture*, 49(1), 77–85. <https://doi.org/10.1177/0030727019873012>
- Sumarto, S., Vothknecht, M., & Wijaya, L. (2014). 12. Explaining regional heterogeneity of poverty: Evidence from a decentralized Indonesia. In H. Hill (Ed.), *Regional dynamics in a decentralized*

- Indonesia (pp. 285–314). ISEAS Publishing.
<https://www.degruyterbrill.com/document/doi/10.1355/9789814519175-019/html>
- Takeshima, H. (2014). Importance of rice research and development in rice seed policies: Insights from Nigeria. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2427279>
- Targba, A. (2022). The impact of armed conflicts on forced migration crises in Nigeria and Mali. *Journal on Migration and Human Security*, 10(4), 238–247. <https://doi.org/10.1177/23315024221148140>
- Uduji, J. I., Okolo-Obasi, E. N., & Asongu, S. A. (2019). Growth Enhancement Support Scheme (GESS) and Farmers' fertilizer use in rural Nigeria. *African Development Review*, 31(3), 348–363. <https://doi.org/10.1111/1467-8268.12394>
- Ugwueze, M. I., Ngwu, E. C., & Onuoha, F. C. (2022). Operation safe corridor programme and reintegration of Ex-Boko Haram fighters in Nigeria. *Journal of Asian and African Studies*, 57(6), 1229–1248. <https://doi.org/10.1177/00219096211047996>
- Van Der Elst, H. (2015). Collective foreign aid and development prospects for Sub-Saharan Africa. *New Contree*, 72, 97–119. <https://doi.org/10.4102/nc.v72i0.182>
- Van Royen, K., Lachat, C., Holdsworth, M., Smit, K., Kinabo, J., Roberfroid, D., Nago, E., Garimoi Orach, C., & Kolsteren, P. (2013). How can the operating environment for nutrition research be improved in Sub-Saharan Africa? The views of african researchers. *PLoS ONE*, 8(6), e66355. <https://doi.org/10.1371/journal.pone.0066355>
- Wairimu, W. W., Christoplos, I., & Hilhorst, D. (2016). From crisis to development: The policy and practice of agricultural service provision in northern Uganda. *Agriculture and Human Values*, 33(4), 799–812. <https://doi.org/10.1007/s10460-015-9665-0>
- Wenjuan, S., & Zhao, K. (2023). Balancing fiscal expenditure competition and long-term innovation investment: Exploring trade-offs and policy implications for local governments. *PLOS ONE*, 18(11), e0293158. <https://doi.org/10.1371/journal.pone.0293158>
- Woldemichael, M. G., & Alemu, B. A. (2024). Does productive safety net program enhance livelihoods? Insights from vulnerable households in Wolaita zone, Ethiopia. *PLOS One*, 19(4), e0297780. <https://doi.org/10.1371/journal.pone.0297780>
- Yusriadi, Y. (2023). Food security and sustainable development: Overcoming poverty through sustainable agriculture. *Journal of Indonesian Scholars for Social Research*, 4(1), 12–18. <https://doi.org/10.59065/jissr.v4i1.130>
- Zhang, Y.-T., & Zhou, W.-X. (2021). Microstructural characteristics of the weighted and directed international crop trade networks. *Entropy*, 23(10), 1250. <https://doi.org/10.3390/e23101250>



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